

DESCRIPTION

The CHG Series is designed to deliver highly efficient H.I.D. lighting to clean areas. These units are ideal for ceiling heights up to 18'. Lower wattages are also available for standard 8' to 9' ceilings. Units are enclosed and gasketed to protect against the chance of foreign matter entering high tech environments through the light fixture. The housing and door are designed to work with standard 1" and 1 1/2" T-grid ceilings. Door frames feature a gasket design which eliminates ledge or crevice exposure preventing the harboring or contaminants. These luminaires are U.L. listed and C.S.A. certified for wet locations.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Application

The CHG Series is suitable for use in I.E.S. Class 100, 1,000, 10,000 and 100,000 clean room environments. Fixtures are manufactured in accordance with U.S.D.A., F.D.A., N.S.F. and Federal Standard 209E. 200 PSI Hose Down Rating is standard. Applications include clean rooms, technical and bio-medical labs, food processing/testing centers and pharmaceutical labs. The CHG with the QL lamp option becomes a sealed luminaire for the most restrictive environments.

A ... Lens

One-piece, clear prismatic, tempered Corning lens with internal prism pattern. Choice of clear polycarbonate or clear tempered glass on environmental side.

B ... Fasteners

Flush mounted, stainless steel machine screws secure through captive cage nuts in housing and are evenly spaced to compress gasketing on all sides.

C ... Housing

Die-formed, 18 ga. CRS with tightly butted and spot welded, sealed end caps. Contains no holes that would allow air passage. Standard white high reflectance polyester powder coat finish. Gloss: 85%; Reflectance: 93%; Hardness: 2H; Salt Spray: 500 Hours.

D ... Lamps

(Lamps By Others)

E ... Lens Retention

Unique, Particlock(TM) lens retention system utilizes continuous, 18 ga. media clampdowns to sandwich gasketing and integrate lens and door frame for even environmental seal.

F ... Hinge

Two braided, stainless steel cables on one side of door provide hinging.

G ... Door

One piece, 18 ga. door with baked white polyester powder coat, fully gasketed, outside door with die-formed and beveled edges eliminates seams which could entrap microscopic contaminants. Optional doors available.

H ... Ballast

Copper wound, HPF ballast is standard.

I ... Gasket

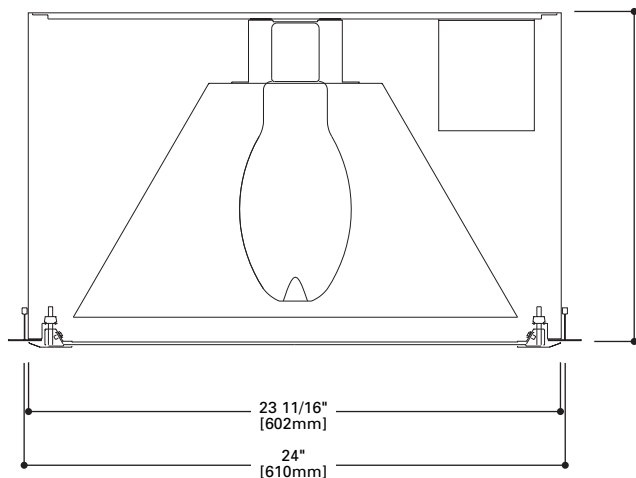
White, closed cell, Flexiseal(TM) gasketing surrounds perimeter of lens to seal lens to door frame and around perimeter of door to seal door to housing. Another layer seals fixture to ceiling system after installation.

J ... Access

A gasketed access plate on top of the housing with two flattened, 7/8" diameter knockouts allows connection of vapor tight conduit fitting. Optional, above ceiling, top access door for luminaire maintenance is available and ideal for food processing and cleanroom applications.

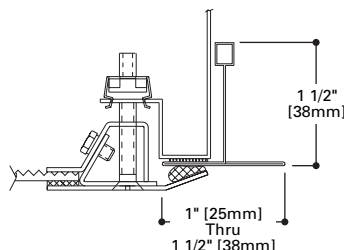
Labels

U.L. listed, C.S.A. certified, standard wet label. Rated for 200 PSI, high-pressure hose-down.



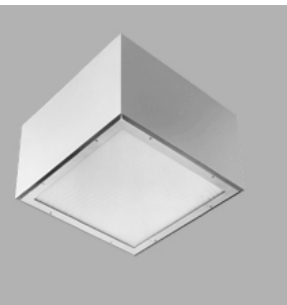
MOUNTING DIMENSIONS

DOOR FRAME



ENERGY DATA

250W Metal Halide
Input Watts: 295
400W Metal Halide
Input Watts: 458
250W HPS
Input Watts: 295
400W HPS
Input Watts: 457



CHG

250W - 400W

Metal Halide

250W - 400W

High Pressure Sodium

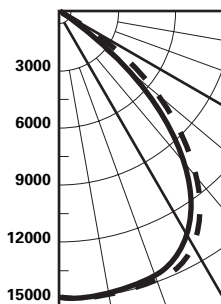
165W

QL Induction

H.I.D. GRID
One-Piece Door

PHOTOMETRICS

Candlepower Distribution



Test No. 5911.2

CHG-400MH

Lamp=400W

Lumens=22115

Spacing Criteria

I=1.3 II=1.3

Efficiency=61.4%

--- I
 --- II

Average
Luminance

Deg.	I	II
45	8230	8120
55	4758	4822
65	3241	3011
75	2539	2628
85	2021	2154

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Luminaire
0-30	8404	23.3	38.0
0-40	13487	37.5	61.0
0-60	20037	55.7	90.6
0-90	22115	61.4	100.0
90-180	0	0.0	0.0
0-180	22115	61.4	100.0

Coefficient of Utilization

rc	80%				70%			50%		30%		10%		0%
rw	70	50	30	10	50	30	10	50	10	50	10	50	10	0
RCR														
0	73	73	73	73	71	71	71	68	68	65	65	63	63	61
1	68	66	64	62	65	63	61	62	59	60	58	58	56	55
2	64	60	57	54	59	56	53	57	52	55	51	53	50	49
3	59	54	50	47	53	50	47	52	46	50	45	49	44	43
4	55	49	45	41	48	44	41	47	40	46	40	44	39	38
5	51	44	40	36	44	39	36	42	36	41	35	40	35	34
6	47	40	36	32	40	35	32	39	32	38	32	37	31	30
7	44	37	32	29	36	32	28	35	28	34	28	34	28	27
8	41	33	28	25	33	28	25	32	25	31	25	30	25	24
9	38	30	25	22	29	25	22	29	22	28	22	28	22	21
10	35	27	23	20	27	23	20	26	19	26	19	25	19	18

rc=Ceiling reflectance, rw=W all reflectance, RCR=Room cavity ratio

CU Data Based on 20% Effective Floor Cavity Reflectance.

ORDERING INFORMATION

SAMPLE NUMBER: CHG-400M-277-73-ALP-QS

Product Family

CHG

CHG=H.I.D. Grid Type

Lamp Type

Metal Halide

250M=250W

400M=400W

High Pressure Sodium

250S=250W

400S=400W

Induction

165Q=165W QL⁽¹⁾

Voltage

120=120V

277=277V

Lens Type

93=Prismatic Tempered Glass (standard)

93/85=.156 Prismatic Tempered Glass with .187 Clear Polycarbonate Underlay

Door/Finish Options

Blank=Standard, CRS with baked white finish

SSN=Stainless Steel Door/Brushed 304 Finish

SSP=Stainless Steel Door/Polyester Powder Coat Finish

ALP=Aluminum Door & Trim Polyester Powder Finish

Options

2TE=Accommodates 2" T-Grid (use with 24" width only)⁽²⁾

SF=Single Fuse

DF=Double Fuse

QS=Quartz Socket (DC bayonet base)

QRS=Quartz Restrike System

TAD=Top Access Door⁽³⁾

Housing Options

SHN=Brushed 304 Finish

SHP=Polyester Coat Finish

ALH=Aluminum, Polyester Powder Finish

Notes:

For additional options please consult Cooper Lighting Representative. Specifications and Dimensions subject to change without notice.

¹Available with 240V. For other voltages, consult your sales representative.²Consult Cooper Lighting Representative.³Consult your Cooper Lighting Representative for dimensional details.